

FELLOWSHIP PROGRAM
of the
MIAMI-DADE COUNTY MEDICAL EXAMINER DEPARTMENT

INTRODUCTION

The Miami-Dade County Medical Examiner Department is located on the northeast corner of the medical campus of the University of Miami School of Medicine. It is across the street from the Jackson Memorial Hospital/Ryder Trauma Center and adjacent to the Miami-Dade Community College Medical Campus. About two blocks south of the Medical Examiner Department is a complete, modern, medical school library. The professional staff of the Medical Examiner Department has faculty appointments at the medical school and participates in sophomore class instruction of both general and forensic pathology. Access to the Miami-Dade Police Crime Laboratory (recognized as one of the most complete in North America) provides another source of mutual consultation and teaching experience.

The population base served by the Medical Examiner Department is approximately two million people. About 2,400 medicolegal autopsies are performed each year. Approximately 1,470 of these are natural deaths. These provide a large data base for the studies of the pathophysiology of disease processes associated with sudden death. Accidents comprise nearly 450 of the autopsies, followed by about 250 suicide deaths and 230 homicides.

Particular emphasis is placed upon the correlation of scene observations and circumstances of death with autopsy findings. Medical Examiners respond to more than 550 scenes per year.

PHILOSOPHY, PURPOSE, AND GOALS

The primary mission of the Miami-Dade County Medical Examiner Department is to provide quality medicolegal death investigation service. These investigations form a large and current data base for statistical and research purposes, often in collaboration with investigators from a number of local colleges and universities. This Fellowship Program is therefore designed to furnish to an already trained pathologist the fundamental philosophy, skills, and knowledge needed to conduct proper medicolegal death investigations.

The pathologist is expected to appreciate that the autopsy is only a laboratory exercise or a tool and is thus only a part of the entire investigation. Final opinions must depend upon cooperation between investigative agencies, correlation of derived data, and awareness of the resources and limitations of all agencies. Particular emphasis is placed on the correlation of scene observations with autopsy and toxicologic findings. Thus the program will enable the graduate to carry out efficient investigations with expediency, accuracy and precision by the appropriate cognitive use of correlative interpretations and associated interagency cooperation.

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COURSE OF STUDY

The initial week is one of general governmental orientation, and introduction to the Medical Examiner Department procedures and staff.

NOTE: County regulations require that a urine sample of a prospective employee be free of illicit drugs prior to full hire. This applies to all employees regardless of job category. The urine drug test is considered a part of the physical examination which must be completed prior to the first full day of scheduled employment.

By the second week, the Fellow is assigned to autopsy and scene investigation duties along with a designated staff member. A series of lectures and demonstrations by the professional staff also commences at this time.

Fellows will attend the week long course, Police-Medical Investigation of Death, which is conducted in July, and covers the following topics:

Corpus Delicti, Investigative Principles, Death Certification, Natural Deaths, Electrocution, Water, Fire, Explosion, Blunt Trauma, Cutting/Stabbing, Sexual Battery, Postmortem Changes, Skeletal Appraisal, Poisons, Forensic Odontology, Firearms, Child Death and Homicide, Motor Vehicles, Aircraft, Disaster Management, Asphyxia, Drugs and Cocaine, Suicides, and Police Shooting Procedures.

Each Fellow is expected to possess Spitz and Fisher's Medicolegal Investigation of Death. The trainee should eventually acquire DiMaio's Gunshot Wounds, DiMaio and DiMaio's Forensic Pathology and the AFIP Histopathology Atlas for the Sudden Infant Death Syndrome. Practical Forensic Pathology by Wetli, Mittleman and Rao is available for loan through the Department Head Secretary, Priscilla McLaughlin. This text is primarily a Fellow's manual and should be thoroughly reviewed. These five books constitute an excellent core for a forensic pathology library. An additional worthwhile book is Baselt's Disposition of Toxic Drugs and Chemicals in Man (Chemical Toxicology Institute, 5th Edition). In addition, each Fellow will be loaned a good quality 35 mm camera with flash attachment. A closeup macro-lens is available for morgue work. Fellows may use their own camera equipment if of good quality. Photographic skills should be proficient to the point that both daylight and flash photography are reliable. Skylight and polarizing filters are recommended photographic accessories. Our Forensic Imaging Bureau staff will assist in improvement of photographic skills.

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Orientation visits to the Metro-Dade Crime Laboratory have the following objectives:

1. Proper techniques of collection, preservation, and transmittal of evidence.
2. Avoidance of evidence contamination.
3. Rudiments of the techniques utilized in forensic serology, fingerprint identification, chemistry, firearms, questioned documents, and fibers.

Orientation at the State Attorney's and Public Defender's Offices are expected to teach the basic legal components of homicide cases. The practical aspects of legal procedures (depositions, courtroom demeanor, witness exclusionary rule, etc.), and the meanings of various terms, are given at this time. Most importantly, Fellows will learn what the prosecuting and the defense attorneys expect from the medical examiner. Subsequent practical experience will reinforce the concept of neutral witness testimony to assist all parties at legal interest.

Toxicology laboratory orientation includes an appreciation of the services offered and economical, pragmatic laboratory use. The Fellow will become familiar with toxicological evidence procedures, and learn the fundamentals of the common methods used to identify drugs, volatiles, metals, and other poisons. Most importantly, the trainee will develop a sense of when to consider poisoning and drug overdose by recognizing the circumstances and societal subsets at risk.

DAILY WORK SCHEDULE

After a one month period of close supervision, the Fellow is assigned to a duty roster for scene call and autopsies. The roster is shared with the permanent medical examiner staff. Scene call is for 24 hours, commencing at 7:00 a.m. Generally, the schedule is such that the Fellow will be assigned for autopsies and scene call once or twice per week and one weekend per month. A staff pathologist provides the Fellow with backup help or advice for scene call, and is assigned for autopsies at the same time as the Fellow.

During the year, the Fellow will perform about 250 or so autopsies (on all manners of death, including homicides) and conduct about 45 scene investigations. Routine scene investigation is required for all homicides and motor vehicle fatalities when the body is at the scene, industrial accidents, and electrocutions. Depending on events, circumstances, and police requests, other cases may also require scene investigation.

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WEEKLY MEETINGS

Each week a staff conference is held. Attendance is mandatory for all medical examiners and Fellows. After a brief administrative/housekeeping meeting, all cases are reviewed where a Fellow has visited the scene. Problem cases and cases of interest are also presented. Each month one Fellow reviews an ASCP Check Sample and discusses it in light of recent literature. The Fellow may also research a current case or review a Forensic topic.

A consultant neuropathologist also reviews cases and about three times each month presents selected instructive cases. One Fellow is responsible for coordinating these cases with the neuropathologist. Our consultant anthropologist reviews skeletal remains at least four times per year and more often when necessary. Our forensic odontologist is on constant call and interacts with physicians every two weeks, or as the need arises.

Pending cases are reviewed bimonthly with Fellow and staff pathologists and prepared for final review by the Chief Medical Examiner or the Deputy Chief Medical Examiner.

MEETINGS AND SEMINARS

Each year the Medical Examiner Commission of the State of Florida hosts a Statewide 3-day scientific seminar covering a variety of topics. Attendance at this seminar is provided by Miami-Dade County government for the Fellows.

Twice a year the Medical Examiner Department conducts a week long seminar on medicolegal death investigation in conjunction with the International Association of Chiefs of police. Fellows, schedules permitting, are encouraged to attend. Specialized crime laboratory sponsored seminars are also open to the Fellows. Although funding is usually not available for a national meeting outside of Florida, educational leave will be granted (schedules permitting) for the trainee should they wish to attend at their own expense. Leave can be arranged to take the American Board of Pathology examination.

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Specialized lectures in specific topics are available to the Fellows and staff during the year on an ad hoc basis (topics have included radiology, anthropology, funeral practice, religion and ethics, and odontology). Weekly seminars at the medical school, especially those of the Department of Pathology, are also available. During the year, didactic information is furnished in matters of governmental administration (personnel management, budgeting, and the role of the Medical Examiner Department in local government).

At the completion of the year each Fellow will have a set of photographic teaching transparencies and reprints of reference articles in addition to their own experience.

RESEARCH

The Fellow is not required to conduct any research project, and is not required to publish any papers. These activities are encouraged however, and the medical examiner staff will readily assist the Fellow in any such endeavor. Publications do not mandate a staff pathologist as a coauthor. Ongoing research with departments of the medical school is common practice.

FACILITIES

The department is housed in a modern three building complex with adequate parking for all. It is designed to afford spacious and beautiful surroundings. Each Fellow office is 13 x 14 feet with and 11 x 14 feet work area shared between offices. The toxicology laboratory has 20,000 square feet. Three autopsy rooms are fully staffed, one being in a separate building for decomposed cases and anthropological study. The autopsy work stations are large, well lit, and designed for ease of use and cleanliness. The air handling systems of the entire complex are the ultimate to assure precipitation of odor causing molecules and filterable dusts. The Records Bureau contains two research record rooms for study of more than four decades of records. The Forensic Imaging Bureau includes an indoor high speed photographic laboratory with motion picture capability of 10,000 frames per second plus a computerized photo-imaging system of the most modern design. That Bureau also conducts an Internship program for photographic students from both within and without Florida. Our own computer system interacts with the Library MEDLINE Service.

Because the facilities are so unique and all encompassing, they are best seen rather than described. It is advisable for candidates to consider a visit about a year before onset of the training program. Some candidates have found it worthwhile to utilize their pathology training elective time at the Miami-Dade County Medical Examiner facility.

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SALARY AND BENEFITS

The current Fellow salary is \$55,000 per annum. Group health and life insurance may be obtained upon employment. One week vacation time is allowed after the first six months of employment. A second week is earned during the remaining six months of employment and may be used as it is earned. The County is self-insured and employees therefore are not required to have their own liability coverage for activities within the scope of employment.

Fellows and County employees are subject to all benefits and employee procedures in keeping with the County, State and Federal rules.

FUTURE

Upon completion, the Fellow should be able to conduct proper medicolegal death investigations. Florida medical licensure is not required but is advisable. Florida is a growing State in both population and economy. A licensed Fellow may find it easier to establish immediate employment within the State of Florida upon completion of the year.